



PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368B

DATE: 08/26/2004
TIME: 17:11:36

Input Set : A:\PTO.FG.txt
Output Set: N:\CRF4\08262004\I674368B.raw

3 <110> APPLICANT: American Cyanamid Company
 5 <120> TITLE OF INVENTION: Vaccines Containing Recombinant Pilin Against Neisseria gonorrhoeae or
 6 Neisseria meningitidis
 W--> 7 <130> FILE REFERENCE: 33377-00/PCT
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/674,368B
 C--> 9 <141> CURRENT FILING DATE: 2000-10-27
 9 <160> NUMBER OF SEQ ID NOS: 24
 11 <170> SOFTWARE: PatentIn version 3.1
 13 <210> SEQ ID NO: 1
 14 <211> LENGTH: 504
 15 <212> TYPE: DNA
 16 <213> ORGANISM: Artificial
 18 <220> FEATURE:
 19 <221> NAME/KEY: CDS
 20 <222> LOCATION: (1)...(501)
 21 <223> OTHER INFORMATION: Chimeric of Neisseria meningitidis Class I and Neisseria gonorrhoeae

ENTERED

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25 atg gat acc ctt caa aaa ggc ttt acc ctt atc gag ctg atg att gtg	48
26 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val	
27 1 5 10 15	
29 atc gcc atc gtc ggc att ttg gcg gca gtc gcc ctt ccc gcc tac caa	96
30 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln	
31 20 25 30	
33 gac tac acc gcc cgc gcg caa gtt tcc gaa gcc atc ctt ttg gcc gaa	144
34 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Ala Glu	
35 35 40 45	
37 ggt caa aaa tca gcc gtt acc gag tat tac ctg aat cac ggc gaa tgg	192
38 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp	
39 50 55 60	
41 ccc ggc aac aac act tct gcc ggc gtg gca tct tct tca aca atc aaa	240
42 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys	
43 65 70 75 80	
45 ggc aaa tat gtt aag gaa gtt aca gtc gca aac ggc gtc att acc gcc	288
46 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala	
47 85 90 95	
49 aca atg ctt tca agc ggc gta aac aaa gaa atc caa ggc aaa aaa ctc	336
50 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu	
51 100 105 110	
53 tcc ctg tgg gcc aag cgt caa gac ggt tcg gta aaa tgg ttc tgc gga	384
54 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly	
55 115 120 125	
57 cag ccg gtt acg cgc acc gac gcc aaa gcc gac acc gtc gcc gcc	432

58 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala

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59	130	135	140		
61	gcc aag acc gcc gac aac atc aac acc aag cac ctg ccg tca acc tgc			480	
62	Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys				
63	145	150	155	160	
65	cgc gac gca agt gat gcc agc taa			504	
66	Arg Asp Ala Ser Asp Ala Ser				
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70	<210> SEQ ID NO: 2				
71	<211> LENGTH: 167				
72	<212> TYPE: PRT				
73	<213> ORGANISM: Artificial				
W-->	74 <220> FEATURE:				
W-->	76 <221> NAME/KEY: amino acid				
77	<222> LOCATION: (1)..(167)				
78	<223> OTHER INFORMATION: Chimeric of Neisseria meningitidis Class I and Neisseria gonorrhoeae				
80	<400> SEQUENCE: 2				
82	Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val				
83	1	5	10	15	
86	Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln				
87	87	20	25	30	
90	Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Ala Glu				
91	91	35	40	45	
94	Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp				
95	95	50	55	60	
98	Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys				
99	99	65	70	75	80
102	Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala				
103	103	85	90	95	
106	Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu				
107	107	100	105	110	
110	Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly				
111	111	115	120	125	
114	Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala				
115	115	130	135	140	
118	Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys				
119	119	145	150	155	160
122	Arg Asp Ala Ser Asp Ala Ser				
123	123	165			
126	<210> SEQ ID NO: 3				
127	<211> LENGTH: 510				
128	<212> TYPE: DNA				
129	<213> ORGANISM: Artificial				
131	<220> FEATURE:				
132	<221> NAME/KEY: CDS				
133	<222> LOCATION: (1)..(507)				
134	<223> OTHER INFORMATION: Chimeric of Neisseria meningitidis Class II and Neisseria gonorrhoeae				
137	<400> SEQUENCE: 3				
139	atg gaa gca atc caa aaa ggt ttc acc ctg atc gag ctg atg atc gtc			48	
140	140 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val				

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141 1	5	10	15	
143 atc gcc atc gtc ggt atc ttg gca gcc gtc gcc ctg ccc gca tac caa				96
144 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln				
145 20	25	30		
147 gac tac acc gcg cgc gcc caa atg tcc gaa gcc ctg act ttg gca gaa				144
148 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu				
149 35	40	45		
151 ggt caa aaa tcc gca gtg atc gag tat tat tcc gac aac ggc aca ttc				192
152 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe				
153 50	55	60		
155 ccg aac agc aat act tcc gca ggt att gct gcc tct aac gag att aaa				240
156 Pro Asn Ser Asn Thr Ser Ala Gly Ile Ala Ala Ser Asn Glu Ile Lys				
157 65	70	75	80	
159 ggt aag tat gtg gca tcg gtt aag gtt gaa ggt aat gcc tct gtt gct				288
160 Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala				
161 85	90	95		
163 tct att acc gct acc atg aac tct agt aat gtg aat aag gac atc aaa				336
164 Ser Ile Thr Ala Thr Met Asn Ser Ser Asn Val Asn Lys Asp Ile Lys				
165 100	105	110		
167 ggt aaa acc ttg gta ctc gtc ggc aaa caa aac tcc ggt tcg gta aaa				384
168 Gly Lys Thr Leu Val Leu Val Gly Lys Gln Asn Ser Gly Ser Val Lys				
169 115	120	125		
171 tgg ttc tgc gga cag ccg gtt acg cgc gac aac gcc gac aac gac gac				432
172 Trp Phe Cys Gly Gln Pro Val Thr Arg Asp Asn Ala Asp Asn Asp Asp				
173 130	135	140		
175 gtc aaa gac gcc ggc aac aac ggc atc gaa acc aag cac ctg ccg tca				480
176 Val Lys Asp Ala Gly Asn Asn Gly Ile Glu Thr Lys His Leu Pro Ser				
177 145	150	155	160	
179 acc tgc cgc gat acg tca tct gat gcc aaa				
180 Thr Cys Arg Asp Thr Ser Ser Asp Ala				
181 165				
184 <210> SEQ ID NO: 4				
185 <211> LENGTH: 169				
186 <212> TYPE: PRT				
187 <213> ORGANISM: Artificial				
189 <220> FEATURE:				
W--> 190 <221> NAME/KEY: amino acid				
191 <222> LOCATION: (1)..(169)				
192 <223> OTHER INFORMATION: Chimeric of Neisseria meningitidis Class II and Neisseria gonorrhoeae				
194 <400> SEQUENCE: 4				
196 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val				
197 1	5	10	15	
200 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln				
201 20	25	30		
204 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu				
205 35	40	45		
208 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe				
209 50	55	60		
212 Pro Asn Ser Asn Thr Ser Ala Gly Ile Ala Ala Ser Asn Glu Ile Lys				

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213	65	70	75	80
216	Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala			
217	85	90	95	
220	Ser Ile Thr Ala Thr Met Asn Ser Ser Asn Val Asn Lys Asp Ile Lys			
221	100	105	110	
224	Gly Lys Thr Leu Val Leu Val Gly Lys Gln Asn Ser Gly Ser Val Lys			
225	115	120	125	
228	Trp Phe Cys Gly Gln Pro Val Thr Arg Asp Asn Ala Asp Asn Asp Asp			
229	130	135	140	
232	Val Lys Asp Ala Gly Asn Asn Gly Ile Glu Thr Lys His Leu Pro Ser			
233	145	150	155	160
236	Thr Cys Arg Asp Thr Ser Ser Asp Ala			
237	165			
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241	<211> LENGTH: 30			
242	<212> TYPE: DNA			
243	<213> ORGANISM: Neisseria gonorrhoeae			
245	<400> SEQUENCE: 5			
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250	<211> LENGTH: 30			
251	<212> TYPE: DNA			
252	<213> ORGANISM: Neisseria gonorrhoeae			
254	<400> SEQUENCE: 6			
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259	<211> LENGTH: 29			
260	<212> TYPE: DNA			
261	<213> ORGANISM: Neisseria gonorrhoeae			
263	<400> SEQUENCE: 7			
264	ggctctagac tgtcagacca agtttactc		29	
267	<210> SEQ ID NO: 8			
268	<211> LENGTH: 27			
269	<212> TYPE: DNA			
270	<213> ORGANISM: Neisseria gonorrhoeae			
272	<400> SEQUENCE: 8			
273	ggctctagat tgaagcattt atcaggg		27	
276	<210> SEQ ID NO: 9			
277	<211> LENGTH: 28			
278	<212> TYPE: DNA			
279	<213> ORGANISM: Neisseria gonorrhoeae			
281	<400> SEQUENCE: 9			
282	ggctctagat aaacagtaat acaagggg		28	
285	<210> SEQ ID NO: 10			
286	<211> LENGTH: 28			
287	<212> TYPE: DNA			
288	<213> ORGANISM: Neisseria gonorrhoeae			
290	<400> SEQUENCE: 10			
291	ggctctagat tagaaaaact catcgagc		28	

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Input Set : A:\PTO.FG.txt
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294 <210> SEQ ID NO: 11
295 <211> LENGTH: 36
296 <212> TYPE: DNA
297 <213> ORGANISM: Neisseria meningitidis Class I
299 <400> SEQUENCE: 11
300 ccccgcgcca tggacaccct tcaaaaaggt tttacc 36
303 <210> SEQ ID NO: 12
304 <211> LENGTH: 39
305 <212> TYPE: DNA
306 <213> ORGANISM: Neisseria meningitidis Class I
308 <400> SEQUENCE: 12
309 gggcctggat ccgagtggcc gtggaaaatc acttaccgc 39
312 <210> SEQ ID NO: 13
313 <211> LENGTH: 31
314 <212> TYPE: DNA
315 <213> ORGANISM: Neisseria meningitidis Class I
317 <400> SEQUENCE: 13
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321 <210> SEQ ID NO: 14
322 <211> LENGTH: 39
323 <212> TYPE: DNA
324 <213> ORGANISM: Neisseria meningitidis Class I
326 <400> SEQUENCE: 14
327 gggcctggat ccgagtggcc gtggaaaatc acttaccgc 39
330 <210> SEQ ID NO: 15
331 <211> LENGTH: 25
332 <212> TYPE: DNA
333 <213> ORGANISM: Neisseria gonorrhoeae
335 <400> SEQUENCE: 15
336 gcataattcg tgtcgctcaa ggcgc 25
339 <210> SEQ ID NO: 16
340 <211> LENGTH: 34
341 <212> TYPE: DNA
342 <213> ORGANISM: Neisseria gonorrhoeae
344 <400> SEQUENCE: 16
345 gccgcgcgtc tcccgtgatt caggtataac tcgg 34
348 <210> SEQ ID NO: 17
349 <211> LENGTH: 25
350 <212> TYPE: DNA
351 <213> ORGANISM: Neisseria meningitidis Class I
353 <400> SEQUENCE: 17
354 gcataattcg tgtcgctcaa ggcgc 25
357 <210> SEQ ID NO: 18
358 <211> LENGTH: 39
359 <212> TYPE: DNA
360 <213> ORGANISM: Neisseria meningitidis Class I
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363 gggcctggat ccgagtggcc gtggaaaatc acttaccgc 39
366 <210> SEQ ID NO: 19

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/26/2004
PATENT APPLICATION: US/09/674,368B TIME: 17:11:37

Input Set : A:\PTO.FG.txt
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4

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Input Set : A:\PTO.FG.txt
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L:7 M:283 W: Missing Blank Line separator, <130> field identifier
L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:74 M:283 W: Missing Blank Line separator, <220> field identifier
L:76 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:190 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4